

**PATENT COOPERATION TREATY**  
**PCT**  
**INTERNATIONAL SEARCH REPORT**  
(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 793-104PCT2	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below	
International application No. <b>PCT/CA2005/000491</b>	International filing date ( <i>day/month/year</i> ) 01 April 2005 (01-04-2005)	(Earliest) Priority date ( <i>day/month/year</i> ) 01 April 2004 (01-04-2004)
Applicant NOVATION PHARMACEUTICALS INC. ET AL		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 6 sheets.

☒ [X] It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of:

☒ [X] the international application in the language in which it was filed

☐ [ ] a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☒ [X] With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I

2. ☐ [ ] **Certain claims were found unsearchable** (see Box No. II)

3. ☐ [ ] **Unity of Invention is lacking** (see Box No. III)

4. With regard to the **title**,

☒ [X] the text is approved as submitted by the applicant

☐ [ ] the text has been established by this Authority to read as follows :

5. With regard to the **abstract**,

☒ [X] the text is approved as submitted by the applicant

☐ [ ] the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 3A

☒ [X] as suggested by the applicant

☐ [ ] as selected by this Authority, because the applicant failed to suggest a figure

☐ [ ] as selected by this Authority, because this figure better characterizes the invention

b. ☐ [ ] none of the figures is to be published with the abstract

**Box No. I      Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)**

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
- a. type of material
    - ☒ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material
    - ☒ on paper
    - ☒ in electronic form
  - c. time of filing/furnishing
    - ☒ contained in the international application as filed.
    - ☒ filed together with the international application in electronic form
    - ☐ furnished subsequently to this Authority for the purposes of search.
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments :

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2005/000491**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of the first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons :

1. ☐ Claim Nos. :  
because they relate to subject matter not required to be searched by this Authority, namely :
  
2. ☐ Claim Nos. :  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically :
  
3. ☐ Claim Nos. :  
because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows :

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claim Nos. :
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claim Nos. :

**Remark on Protest** ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☐ No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2005/000491A. CLASSIFICATION OF SUBJECT MATTER  
IPC(7): C12N 15/63, C12Q 1/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(7): C12N 15/63, C12Q 1/68

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)  
Canadian Patent Database, Delphion, Pubmed, STN CaPlus (keywords: instability sequence, vector, assay, AREs, CDRs AU-rich, AUUUA, and/or ATTTA)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00 39314 A1 (NOVATION PHARMACEUTICALS INC.) 6 July 2000 (06-07-2000)	1-4 and 6-22
Y	whole document	5
X	WO 00 38674 A1 (NOVATION PHARMACEUTICALS INC.) 6 July 2000 (06-07-2000)	1-4, 6-8, 10-16 and 18-21
	whole document	
X	KASTELIC T ET AL: "Induction of rapid IL-1 $\beta$ mRNA degradation in THP-1 cells mediated through the AU-rich region in the 3'UTR by a radicicol analogue", CYTOKINE. October 1996, Vol. 8, No. 10, pages 751-761 see page 758, second paragraph	1-4 and 6-8
X	YEILDING N ET AL: "Coding elements in exons 2 and 3 target c-myc mRNA downregulation during myogenic differentiation", MOLECULAR AND CELLULAR BIOLOGY. May 1997, Vol 17, No. 5, pages 2698-2707 whole document; see especially figure 1	1-8

[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"B" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"C" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"A" document member of the same patent family

Date of the actual completion of the international search

15 July 2005 (15-07-2005)

Date of mailing of the international search report

23 August 2005 (23.08.2005)

Name and mailing address of the ISA/CA  
Canadian Intellectual Property Office  
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Gatineau, Quebec K1A 0C9  
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## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2005/000491

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	ROSS J ET AL: "mRNA stability in mammalian cells", MICROBIOLOGICAL REVIEWS. September 1995, Vol. 59, No. 3, pages 423-450 whole document	1-22

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
PCT/CA2005/000491

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
WO0039314	06-07-2000	AU776604 B2	16-09-2004
		AU1852200 A	31-07-2000
		CA2356621 A1	06-07-2000
		EP1141358 A1	10-10-2001
		GB9828709D D0	17-02-1999
		JP2002541767T T	10-12-2002
		US2004231007 A1	18-11-2004
WO0038674	06-07-2000	AU779438 B2	27-01-2005
		AU1852100 A	31-07-2000
		CA2356622 A1	06-07-2000
		EP1140069 A1	10-10-2001
		GB9828707D D0	17-02-1999
		GB9828710D D0	17-02-1999
		JP2002533389T T	08-10-2002
		US6635671 B1	21-10-2003